

U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

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| DEPARTMENTAL REGULATION | | NUMBER: 3400-4 |
| SUBJECT: Departmental Data Administration Program | DATE: August 2, 1994 | |
| | OPI: Office of Information Resources Management, Information Management Division | |

1 PURPOSE

This regulation establishes and assigns responsibilities for a USDA Data Administration Program and is applicable throughout the life cycle of all USDA information systems. The goals of the program are to improve the quality of data provided to decision makers; increase the return on investment in information technology; and increase the sharing and reuse of data across organizational boundaries. This regulation applies to all data in USDA information systems.

2 SPECIAL INSTRUCTIONS/CANCELLATIONS

This regulation cancels Departmental Regulation 3400-2, dated December 20, 1985.

3 POLICY

a It is USDA policy to institute a Departmental Data Administration structure that consists of three management levels:

(1) Departmental Data Administrator -
Manages the USDA Data Administration
Program;

(2) Under/Assistant Secretary (Mission
Area) Data Administrator - Coordinates
the Data Administration Program for all
agencies within the Mission Area,

and/or all agencies in Special Interagency Projects; and

(3) Agency, Staff Office, Special Interagency Project Data Administrator - Develops and manages their respective Data Administration Program, within guidelines established, in this policy.

b It is USDA policy to have an effective and efficient Departmental Data Administration Program that will:

(1) Establish policies, procedures, guidelines, and standards for the planning, operation, and assessment of the Data Administration Program;

(2) Support data sharing and reuse within USDA and with other government agencies, private sector organizations, and individuals;

(3) Recommend tools and techniques within the , , Data Administration Program to ensure consistency and interoperability;

(4) Provide education to staff on the principles, methods, and techniques to achieve a shared data environment;

(5) Identify planning, reporting, and resource requirements for effective data administration;

(6) Describe the detailed administrative relationships among the Departmental Data Administrator, Under/Assistant Secretary Data Administrators, Agency Data Administrators, and users of the data;

(7) Establish model based methods to identify and document information needs and design data for maximum data sharing and reuse capability;

(8) Standardize data for maximum data sharing capability; and

(9) Comply with Federal, National, and International standards before creating Department of Agriculture unique standards.

c USDA data element standards shall be used when defining information requirements and when designing, developing, or modifying information systems.

4 REGULATIONS AND STANDARDS

The following is a list of those federal laws and regulations to which this policy is subject. Standard definitions have been established in these regulations and are the ones adhered to by this policy.

a Federal Records Management Amendments of 1976, Public Law 94-575;

b Computer Security Act of 1987, Public Law 100-235;

c OMB Circular A-130, Management of Federal Information Resources;

d General Services Administration, Federal Information Resources Management Regulation, Title 41, Subtitle E, Chapter 201; and

e Federal Information Processing Standards publications on Hardware, Software, Data, Computer Security, and computer related Telecommunications Standards and Guidelines.

f Specific publications that might be of interest are:

(1) FIPS PUB 45

(2) FIPS PUB 76

(3) FIPS PUB 110

(4) FIPS PUB 156

(5) FIPS PUB 183

(6) FIPS PUB 184

5 DEFINITIONS

Guide for the Development, Implementation and Maintenance of Standards for the Representation of-Computer Processed Data Elements; Guideline for Planning and Using a Data Dictionary System; Guidelines for Choosing a Data Management Approach; Information Resource Dictionary System (IRDS); Integration Definition for Function Modeling (IDEFO); and Integration Definition for Information Modeling (IDEF1X).

The following are selected edited definitions which will aid in the understanding of this regulation. Unless specifically noted, they were taken from the American National Standard for Information Systems Dictionary for Information Systems, FIPS PUB 11-3, ANSI X3.172-1990. Definitions reprinted from the International Organization for Standardization's Vocabulary - Information Processing, ISO 2382, are identified by the symbol (ISO) preceding the definition.

a Data.

(1) (ISO) A representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by humans or by automatic means.

(2) Any representations such as characters or analog quantities to which meaning is or might be assigned.

b Data Administration. The function of controlling the acquisition, analysis, storage, retrieval, and distribution of data.

c Data Administrator. The person who defines, organizes, manages, controls, and protects data.

d Data Architecture. The framework for organizing and defining the interrelationships of data in support of an organization's missions, functions, goals, objectives and strategies. Data architectures provide the basis for the incremental, ordered design and development of databases based on successively more detailed levels of data modeling. (DoD 8320.1-M)

e Data Element.

(1) (ISO) A named unit of data that, in some contexts, is considered indivisible and in other contexts may consist of data items.

(2) A named identifier of each of the entities and their attributes that are represented in a database.

f Data Model. In a database, the user's logical view of the data in contrast to the physically stored data or storage structure. A description of the organization of data in a manner that reflects the information structure of an organization.

g Data Stewardship. The management by a person or group of the development, approval, and use of data within a specified program or functional area, ensuring that it can be used to satisfy data requirements throughout the organization. (DoD 8320.1-M-1)

h Information System. A system that consists of people, machines, and methods for organizations to accomplish specified operations on data that represent information. An information system may include data processing equipment, such as computers and storage devices; office machines, such as text processors and copiers; communications equipment, such as communication controllers and switching devices; peripheral equipment; and associated data media and accessories.

i Metadata. In database management systems, information about an organization's information and data activities.

6 RESPONSIBILITIES

a The OIRM Director will:

(1) Prescribe, maintain, and monitor USDA data administration policies, procedures, criteria, rules, and terms for use by USDA organizational units;

(2) Provide resources necessary to effectively manage the USDA Data Administration Program; and

(3) Designate a Departmental Data Administrator who will:

(a) Resolve USDA data administration issues; and

(b) Represent USDA on matters pertaining to the development and adoption of data standards.

b The Under/Assistant Secretaries will:

(1) Provide resources necessary to effectively execute data administration responsibilities;

(2) Designate an Executive Sponsor, as applicable, to represent Special Interagency Projects; and

(3) Designate an Under/Assistant Secretary (Mission Area) Data Administrator. This designee, who may be the Data Administrator of one of the agencies within the Mission Area, will:

(a) Coordinate data administration activities, and resolve data

administration issues of all agencies within the Mission Area; and

(b) Represent Under/Assistant Secretary interests to the OIRM Director and the Departmental Data Administrator on all matters related to data administration.

c Agencies, Staff Offices and Special Interagency Projects will:

(1) Provide resources necessary to effectively execute data administration responsibilities;

(2) Establish and maintain a Data Administration Program in accordance with Departmental policies, standards and guidelines; and

(3) Designate a Data Administrator who will:

(a) Implement and enforce data administration policy, procedures, and standards;

(b) Represent Agency, Staff Office, or Special Interagency Project interests to their respective Under/Assistant Secretary (Mission Area) Data Administrator;

(c) Manage data in accordance with Departmental Data Administration policy, procedures, and standards;

(d) Develop and maintain the data architecture;

(e) Implement and coordinate the data standardization approval process to include quality assurance of metadata and usage, in conjunction with business area experts, application developers, and responsible staff in other affected areas;

(f) Review and approve data models and elements, ensure compliance with standards, and provide resolution of conflicts;

(g) Arbitrate issues or inconsistencies of data stewardship and usage;

(h) Identify and provide for data administration training and education requirements;

(i) Coordinate with the appropriate security officer to ensure that security needs are met, including security training, risk analysis, and control over data access; and

(j) Represent the Agency, Staff Office, or Special Interagency Project on matters pertaining to the development and adoption of data standards.

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